

REMARKS

The Applicants appreciate the Examiner's thorough examination of the subject application. Applicants request reconsideration of the subject application based on the following remarks.

Claims 1, 4, 6, 8-10, 14-16, and 20-22 are pending in this application. Claim 1 has been amended. No new matter has been introduced by virtue of the amendments made to the claims. For instance, support for the amended claims appears at page 3, lines 17-23 and in Examples 1, 3, and 4.

Claims 1, 4, 6, 8-10, 14-16, and 20-22 were rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The rejection is traversed.

Claims 1, 4, 6, 8-10, 14-16, and 20-22, as amended, comply with all of the requirements of 35 U.S.C. §112, including the requirements of §112, first paragraph. See, for example, page 3, lines 17-23 and more particularly lines 22 and 23 for support for claim 1 as amended.

Applicants request that the rejection be withdrawn.

Claims 1, 4, 6, 8-10, and 14-16 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Bartsch (U.S. Patent 4,158,737).

Claims 20 and 21 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Bartsch (U.S. Patent 4,158,737) in view of Sennewald (U.S. Patent 3,655,747).

Claim 22 was rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bartsch (U.S. Patent 4,158,737) and Sennewald (U.S. Patent 3,655,747) and further in view of Kronig et al. (U.S. Patent 3,822, 308).

For the sake of brevity, the three § 103 rejections are addressed in combination. Such a combined response is considered appropriate because *inter alia* each of the rejections relies on the Bartsch patent as the sole or primary citation. Each of the rejections is traversed.

The Office Action takes the position that the Bartsch patent teaches catalysts comprising palladium, tin and mixtures of tin with other metals.

As the reference is understood, Bartsch teaches improved solid supports increasing the catalyst life of palladium catalysts deposited thereon. More particularly, Bartsch recites increased catalyst life for known supported palladium catalysts by deposition of the metal(s) onto an alumina catalyst comprising at least 96% α -alumina. The catalysts recited by Bartsch are primarily palladium and may further comprise an additional metal selected from the laundry list of metals provided at column 5, lines 46-55. Thus, Example II and Table B recite several catalysts composed of palladium and gold.

Applicant's note that claim 1 of the Bartsch patent particularly points out that the improvement provided therein is the composition of the solid support **not** the catalyst composition. More particularly, one skilled in the art would not have been motivated by the teaching of Bartsch to modify the composition of the oxyacylation catalysts recited by Bartsch and there would have been no basis for an expectation of improved catalyst performance based on such modifications. Bartsch does not disclose any oxyacylation catalysts comprising tin but for the inclusion of tin in a laundry list of possible metallic additives. Moreover, Bartsch does not disclose or suggest any oxyacylation catalysts composed of a combination of any three metals much less oxyacylation catalysts comprising palladium, tin and gold.

Thus, there is neither disclosure nor suggestion in Bartsch of the oxyacylation catalyst of the present invention, e.g., an oxyacylation catalyst consisting essentially of palladium and tin or palladium, tin and gold. Further, there is neither disclosure nor suggestion in Bartsch that such a catalyst would provide improved catalyst activity, catalyst selectivity, or catalyst life when compared to prior art catalyst compositions. Thus, the Bartsch patent does not provide motivation to one skilled in the art to modify the palladium based oxyacylation catalysts disclosed by the Bartsch patent.

The disclosures of Sennewald and Kronig fail to overcome the limitations of the Bartsch disclosures. Sennewald merely recites a method of reductive deposition of metals onto a particle surface using hydrazine as the reductant. Kronig teaches the use of ethylene gas at elevated temperature to reduce a mixture of palladium and gold salts to metallic palladium and gold. No combination of Bartsch and the supporting references, taken alone or in combination, teach or suggest an oxyacylation catalyst consisting essentially of palladium and tin or palladium, tin, and gold.

Claims 1 and 20 are patentable over any combination of the Bartsch, Sennewald, and/or Kronig documents. Claims 4, 6, 8-10, 14-16, and 21-22 depend from either claim 1 or claim 20 and are therefore also patentable over any combination of the cited references.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,



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